Abstract

Thesis title: An effect of the epicondilar brace and tape on hand clutch power which is measured by a manual dynamometer

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The aim of the thesis: The goal of my thesis is to find out the effect of the epicondilar brace and tape which these two have on maximal muscular power of a dominant upper limb while clutching the hand. This is measured by a manual dynamometer. Their effect hasn´t been clarified yet. The epicondilar brace and taping are used as a part of a conservative therapy in epikondylitis lateralis.

Methods: In my thesis I have observed maximal muscular power while clutching a hand on a dominant upper limb. Ten probands (women) have taken part in my experiment, their age span was 24 - 29 years. For measuring of muscular power a manual dynamometer Grip D T.K.K.5401 has been used. The muscular power has been measured under three conditions – without an aid and with an aid – with the epicondilar brace (Snížek Ortoprotetika) and with a stable tape (Strappal). Under these conditions there are also changes of a wrist position- there is a central position, palmar position and dorsal flexis, this one in a central position of a wrist. There is a statistical result of measurements.

Results: The results of my thesis show an important effect of a position of a wrist on maximal hand clutch power. The effect of both aids on muscular power hasn´t been statistically proved.

Keywords: epicondylitis lateralis, tennis elbow, epicondilar brace, tape, isometric muscular power, dynamometry